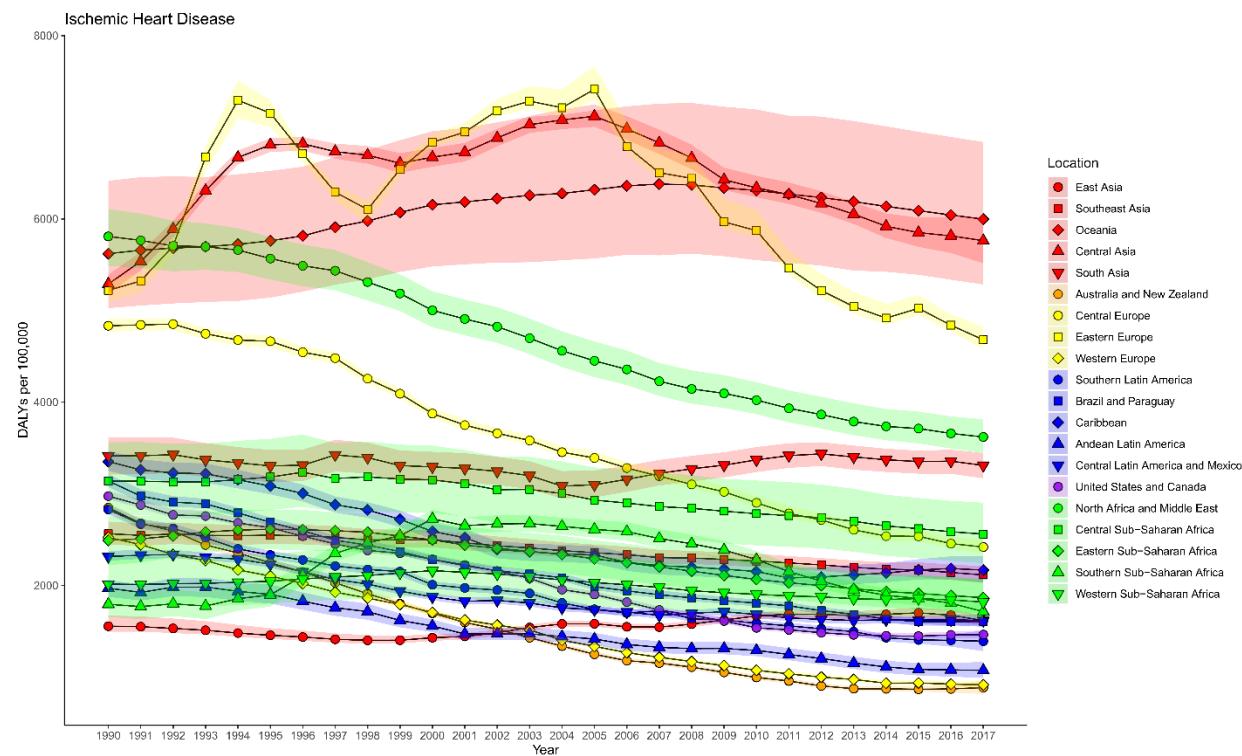
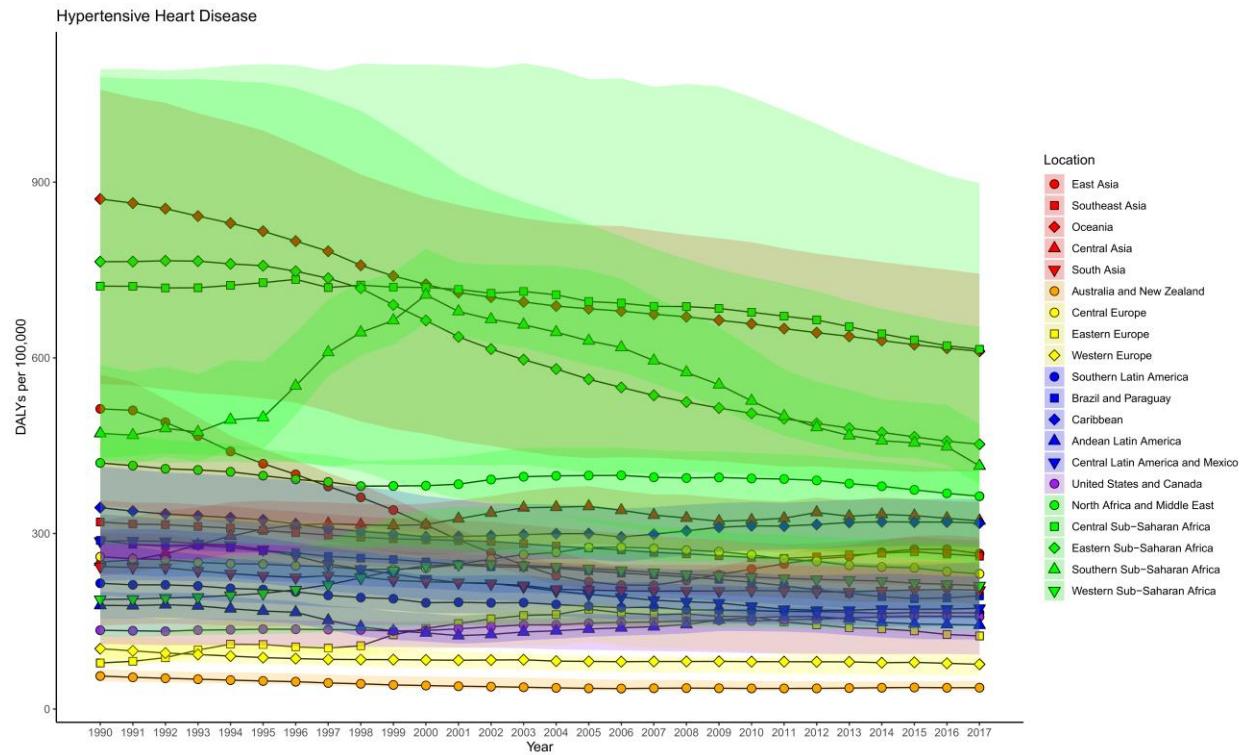


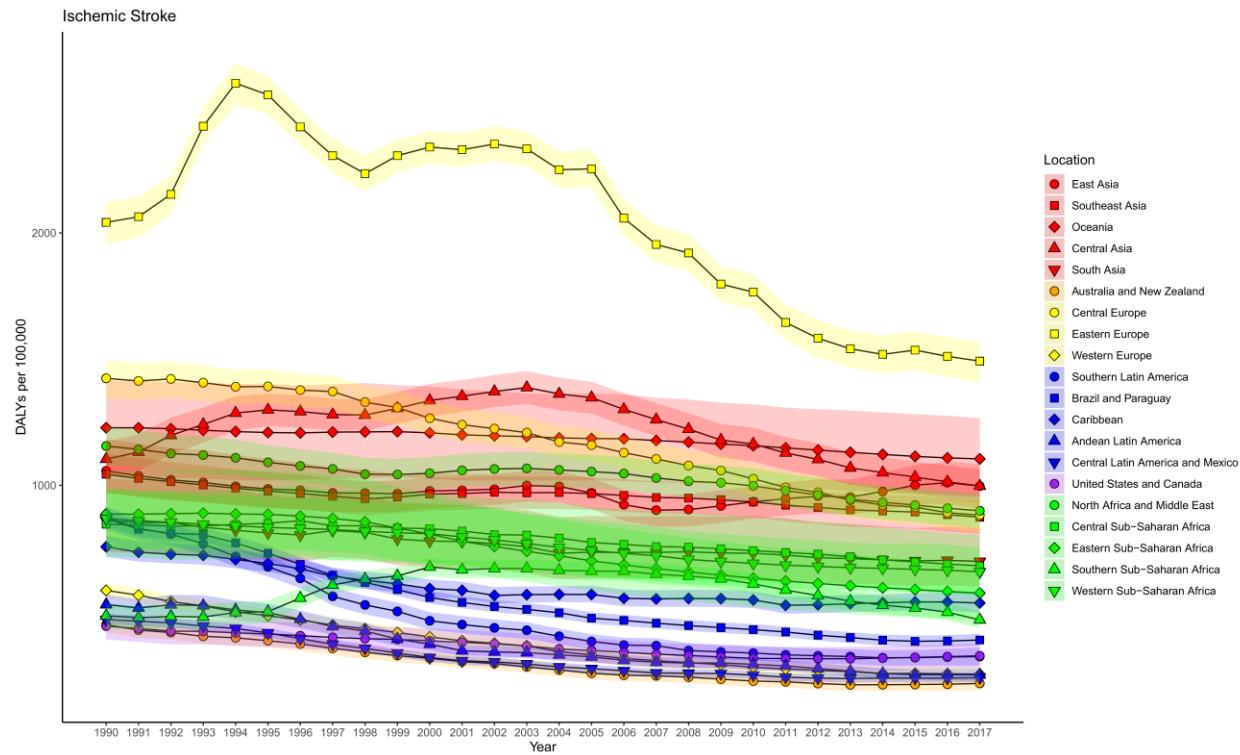
Supplemental Material



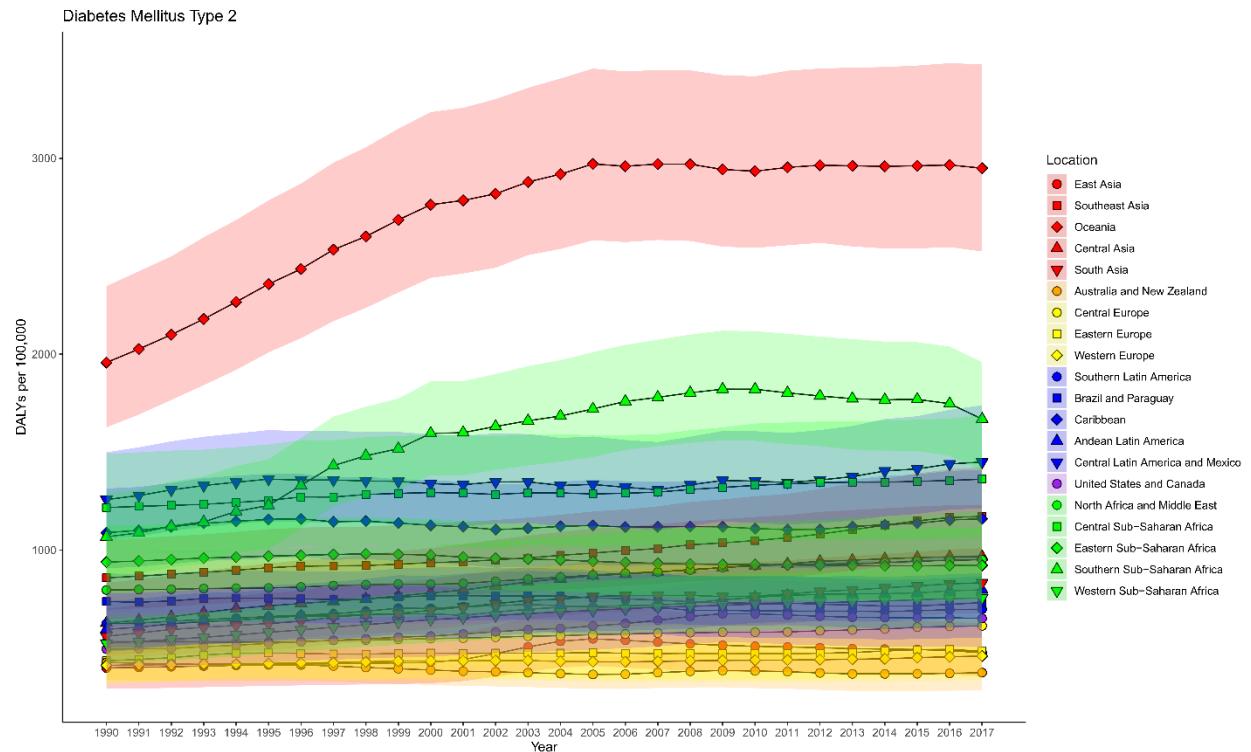
Online Figure I. Data used for the figure was downloaded from the Institute for Health Metrics and Evaluation's Global Burden of Disease (GBD) Compare Data Visualization tool and is available at <http://vizhub.healthdata.org/gbd-compare>. Points represent age-standardized disability-adjusted life-years from ischemic heart disease per 100,000 population. Colors represent larger regions: green – Africa and Middle East, red – Asia, orange – Australia and New Zealand, yellow – Europe, blue – Latin America and Caribbean, purple – United States and Canada. Shaded regions around the points represent 95th uncertainty intervals calculated by the Institute for Health Metrics and Evaluation.



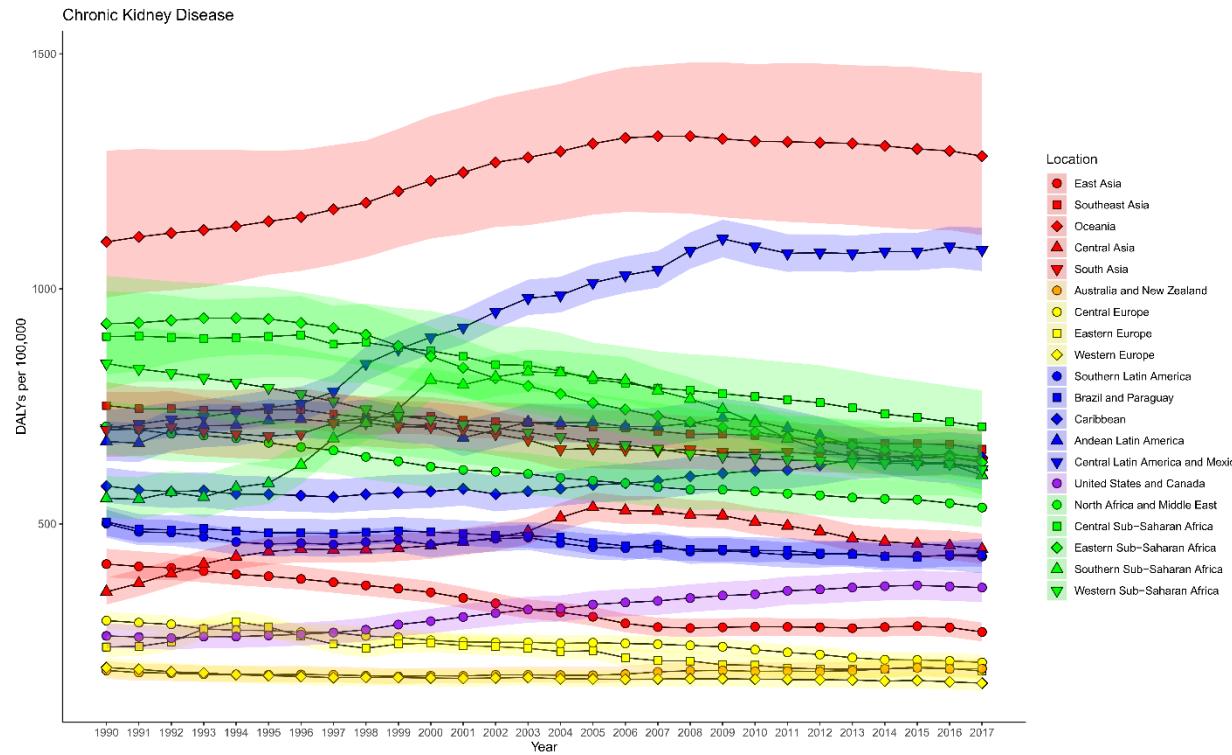
Online Figure II. Data used for the figure was downloaded from the Institute for Health Metrics and Evaluation's Global Burden of Disease (GBD) Compare Data Visualization tool and is available at <http://vizhub.healthdata.org/gbd-compare>. Points represent age-standardized disability-adjusted life-years from hypertensive heart disease per 100,000 population. Colors represent larger regions: green – Africa and Middle East, red – Asia, orange – Australia and New Zealand, yellow – Europe, blue – Latin America and Caribbean, purple – United States and Canada. Shaded regions around the points represent 95th uncertainty intervals calculated by the Institute for Health Metrics and Evaluation.



Online Figure III. Data used for the figure was downloaded from the Institute for Health Metrics and Evaluation's Global Burden of Disease (GBD) Compare Data Visualization tool and is available at <http://vizhub.healthdata.org/gbd-compare>. Points represent age-standardized disability-adjusted life-years from ischemic stroke per 100,000 population. Colors represent larger regions: green – Africa and Middle East, red – Asia, orange – Australia and New Zealand, yellow – Europe, blue – Latin America and Caribbean, purple – United States and Canada. Shaded regions around the points represent 95th uncertainty intervals calculated by the Institute for Health Metrics and Evaluation.



Online Figure IV. Data used for the figure was downloaded from the Institute for Health Metrics and Evaluation's Global Burden of Disease (GBD) Compare Data Visualization tool and is available at <http://vizhub.healthdata.org/gbd-compare>. Points represent age-standardized disability-adjusted life-years from Type 2 Diabetes per 100,000 population. Colors represent larger regions: green – Africa and Middle East, red – Asia, orange – Australia and New Zealand, yellow – Europe, blue – Latin America and Caribbean, purple – United States and Canada. Shaded regions around the points represent 95th uncertainty intervals calculated by the Institute for Health Metrics and Evaluation.



Online Figure V. Data used for the figure was downloaded from the Institute for Health Metrics and Evaluation's Global Burden of Disease (GBD) Compare Data Visualization tool and is available at <http://vizhub.healthdata.org/gbd-compare>. Points represent age-standardized disability-adjusted life-years from chronic kidney disease per 100,000 population. Colors represent larger regions: green – Africa and Middle East, red – Asia, orange – Australia and New Zealand, yellow – Europe, blue – Latin America and Caribbean, purple – United States and Canada. Shaded regions around the points represent 95th uncertainty intervals calculated by the Institute for Health Metrics and Evaluation.

Online Table I. Data was downloaded from the Institute for Health Metrics and Evaluation's Global Burden of Disease (GBD) Results Tool and is available at <http://ghdx.healthdata.org/gbd-results-tool>. Values are the proportion of disability-adjusted life years (DALYs) for each cause relative to DALYs for all causes in 2017.

Region/Cause	Female % total DALYs	Male % total DALYs
AFRICA		
Central Sub-Saharan Africa		
Chronic kidney disease	0.78%	0.73%
Hypertensive heart disease	0.62%	0.29%
Ischemic heart disease	1.84%	2.07%
Ischemic stroke	0.61%	0.31%
Type II Diabetes mellitus	1.18%	1.30%
Eastern Sub-Saharan Africa		
Chronic kidney disease	0.80%	0.80%
Hypertensive heart disease	0.56%	0.27%
Ischemic heart disease	1.43%	2.01%
Ischemic stroke	0.60%	0.37%
Type II Diabetes mellitus	0.91%	0.97%
North Africa and Middle East		
Chronic kidney disease	1.66%	1.36%
Hypertensive heart disease	1.01%	0.75%
Ischemic heart disease	7.55%	10.73%
Ischemic stroke	2.33%	1.96%
Type II Diabetes mellitus	3.01%	2.36%
Southern Sub-Saharan Africa		
Chronic kidney disease	1.05%	1.09%
Hypertensive heart disease	0.84%	0.50%
Ischemic heart disease	2.70%	2.76%
Ischemic stroke	0.89%	0.50%
Type II Diabetes mellitus	3.18%	2.45%

Western Sub-Saharan Africa		
Chronic kidney disease	0.75%	0.76%
Hypertensive heart disease	0.24%	0.10%
Ischemic heart disease	1.34%	1.40%
Ischemic stroke	0.59%	0.36%
Type II Diabetes mellitus	0.70%	0.62%
ASIA		
Central Asia		
Chronic kidney disease	1.44%	1.25%
Hypertensive heart disease	0.93%	0.70%
Ischemic heart disease	12.83%	15.97%
Ischemic stroke	2.72%	2.14%
Type II Diabetes mellitus	3.17%	2.57%
East Asia		
Chronic kidney disease	1.40%	1.29%
Hypertensive heart disease	1.36%	1.25%
Ischemic heart disease	7.29%	8.65%
Ischemic stroke	4.88%	5.05%
Type II Diabetes mellitus	2.48%	2.40%
South Asia		
Chronic kidney disease	1.47%	1.58%
Hypertensive heart disease	0.52%	0.32%
Ischemic heart disease	5.63%	9.19%
Ischemic stroke	1.47%	1.35%
Type II Diabetes mellitus	1.89%	1.89%
Southeast Asia		
Chronic kidney disease	2.32%	2.04%
Hypertensive heart disease	0.86%	0.76%
Ischemic heart disease	5.39%	7.68%
Ischemic stroke	2.48%	2.44%
Type II Diabetes mellitus	4.42%	3.44%

Oceania		
Chronic kidney disease	2.03%	1.75%
Hypertensive heart disease	0.89%	0.68%
Ischemic heart disease	5.58%	9.35%
Ischemic stroke	1.30%	1.05%
Type II Diabetes mellitus	4.56%	3.09%
AUSTRALASIA		
Australia and New Zealand		
Chronic kidney disease	1.30%	1.22%
Hypertensive heart disease	0.30%	0.23%
Ischemic heart disease	4.40%	7.71%
Ischemic stroke	1.73%	1.48%
Type II Diabetes mellitus	2.28%	2.51%
EUROPE		
Central Europe		
Chronic kidney disease	1.07%	0.91%
Hypertensive heart disease	1.49%	1.08%
Ischemic heart disease	11.73%	13.85%
Ischemic stroke	5.79%	4.19%
Type II Diabetes mellitus	3.06%	2.81%
Eastern Europe		
Chronic kidney disease	0.78%	0.49%
Hypertensive heart disease	0.57%	0.40%
Ischemic heart disease	17.21%	18.38%
Ischemic stroke	7.32%	4.63%
Type II Diabetes mellitus	2.26%	1.31%
Western Europe		
Chronic kidney disease	1.24%	1.15%
Hypertensive heart disease	0.79%	0.54%
Ischemic heart disease	5.37%	8.67%
Ischemic stroke	2.30%	1.99%

Type II Diabetes mellitus	2.82%	3.14%
LATIN AMERICA & CARIBBEAN		
Andean Latin America		
Chronic kidney disease	2.60%	2.26%
Hypertensive heart disease	0.62%	0.48%
Ischemic heart disease	3.48%	4.66%
Ischemic stroke	0.99%	0.89%
Type II Diabetes mellitus	3.37%	2.81%
Brazil and Paraguay		
Chronic kidney disease	1.79%	1.50%
Hypertensive heart disease	0.85%	0.61%
Ischemic heart disease	5.23%	6.78%
Ischemic stroke	1.49%	1.32%
Type II Diabetes mellitus	3.28%	2.37%
Caribbean		
Chronic kidney disease	2.17%	2.01%
Hypertensive heart disease	1.20%	0.93%
Ischemic heart disease	6.56%	7.77%
Ischemic stroke	1.97%	1.57%
Type II Diabetes mellitus	4.41%	3.33%
Central Latin America and Mexico		
Chronic kidney disease	4.34%	3.97%
Hypertensive heart disease	0.79%	0.48%
Ischemic heart disease	5.22%	6.55%
Ischemic stroke	1.00%	0.73%
Type II Diabetes mellitus	6.20%	4.98%
Southern Latin America		
Chronic kidney disease	2.04%	1.92%
Hypertensive heart disease	0.84%	0.75%
Ischemic heart disease	5.28%	7.72%
Ischemic stroke	1.72%	1.40%

Type II Diabetes mellitus	3.31%	3.14%
NORTH AMERICA		
United States and Canada		
Chronic kidney disease	1.86%	1.84%
Hypertensive heart disease	0.70%	0.87%
Ischemic heart disease	6.19%	9.54%
Ischemic stroke	2.04%	1.59%
Type II Diabetes mellitus	3.14%	3.55%

Online Table II. Data was downloaded from the Institute for Health Metrics and Evaluation's (IHME) Global Burden of Disease (GBD) Results Tool and is available at <http://ghdx.healthdata.org/gbd-results-tool>. Rates are age-standardized disability-adjusted life-years per 100,000 population. The lower and upper bounds represent 95th uncertainty intervals calculated by the Institute for Health Metrics and Evaluation.

Region/Cause	Female			Male		
	Age-standardized DALYs			Age-standardized DALYs		
	Rate	lower	upper	Rate	lower	upper
AFRICA						
Central Sub-Saharan Africa						
Chronic kidney disease	638.70	733.77	556.82	794.42	910.46	676.26
Diabetes mellitus type 2	1138.00	1438.38	883.77	1635.02	2016.59	1280.33
Hypertensive heart disease	753.52	1209.87	372.73	420.10	556.45	231.39
Ischemic heart disease	2222.73	2660.81	1832.81	2902.94	3408.44	2400.41
Ischemic stroke	774.66	961.03	619.20	551.50	687.78	443.63
Eastern Sub-Saharan Africa						
Chronic kidney disease	561.92	614.70	510.67	707.65	785.17	648.25
Diabetes mellitus type 2	786.73	959.80	625.15	1070.62	1302.49	842.92
Hypertensive heart disease	565.08	931.39	287.20	319.74	428.52	180.28
Ischemic heart disease	1417.73	1617.46	1228.54	2342.21	2614.99	2105.87
Ischemic stroke	622.73	754.61	505.83	515.66	659.99	403.83
North Africa and Middle East						
Chronic kidney disease	533.43	486.10	582.06	538.31	483.39	579.60
Diabetes mellitus type 2	986.37	783.20	1239.37	917.09	721.53	1162.13
Hypertensive heart disease	378.65	240.28	432.28	347.16	197.69	400.64
Ischemic heart disease	2678.96	2459.26	2870.63	4537.54	4273.36	4801.76
Ischemic stroke	868.92	791.63	949.21	931.71	854.06	1015.32
Southern Sub-Saharan Africa						
Chronic kidney disease	490.06	533.83	451.09	763.02	818.16	673.68

Diabetes mellitus type 2	1559.30	1837.79	1327.92	1812.65	2146.16	1509.47
Hypertensive heart disease	423.59	500.21	380.05	398.92	463.45	365.26
Ischemic heart disease	1375.67	1481.40	1282.97	2155.68	2270.86	2046.66
Ischemic stroke	472.20	514.62	433.75	456.11	487.69	423.09

Western Sub-Saharan Africa

Chronic kidney disease	537.01	609.85	475.97	700.75	829.29	621.78
Diabetes mellitus type 2	733.85	906.24	592.01	779.20	953.82	625.42
Hypertensive heart disease	279.85	393.95	146.81	136.87	171.25	95.08
Ischemic heart disease	1671.57	1906.80	1457.52	1977.47	2291.10	1727.38
Ischemic stroke	753.95	887.24	632.21	554.74	656.25	468.93

ASIA

Central Asia

Chronic kidney disease	394.37	357.61	434.52	512.44	479.25	549.28
Diabetes mellitus type 2	874.42	679.63	1110.87	1075.76	832.35	1369.59
Hypertensive heart disease	284.93	205.34	327.90	373.09	282.05	422.56
Ischemic heart disease	3988.35	3744.87	4248.11	8146.73	7729.77	8604.77
Ischemic stroke	858.21	788.04	927.55	1186.99	1102.91	1269.17

East Asia

Chronic kidney disease	242.42	222.99	262.66	298.28	269.40	321.75
Diabetes mellitus type 2	415.90	311.20	539.01	534.18	397.68	702.22
Hypertensive heart disease	232.76	150.51	263.38	299.66	191.76	333.65
Ischemic heart disease	1240.10	1177.98	1308.68	2003.91	1918.47	2096.04
Ischemic stroke	825.24	733.65	914.62	1183.93	1090.46	1281.77

South Asia

Chronic kidney disease	586.61	541.77	630.89	683.08	628.90	731.97
Diabetes mellitus type 2	802.60	649.91	979.61	862.40	689.37	1049.09
Hypertensive heart disease	243.85	155.52	306.93	157.93	103.91	210.56

Ischemic heart disease	2449.59	2264.03	2587.65	4183.47	3977.30	4388.98
Ischemic stroke	691.29	581.31	825.18	706.07	583.11	865.30

Southeast Asia

Chronic kidney disease	597.43	553.64	643.85	726.11	667.49	778.48
Diabetes mellitus type 2	1125.17	904.91	1381.17	1220.76	995.61	1469.88
Hypertensive heart disease	232.38	190.74	265.50	290.42	209.71	334.42
Ischemic heart disease	1445.76	1365.42	1538.92	2872.99	2714.49	3043.59
Ischemic stroke	711.19	635.87	788.61	1072.65	977.64	1165.83

Oceania

Chronic kidney disease	1230.89	1063.42	1425.46	1333.18	1055.66	1590.95
Diabetes mellitus type 2	3249.06	2733.68	3878.40	2668.96	2218.49	3240.05
Hypertensive heart disease	638.24	354.61	825.82	582.08	392.25	784.28
Ischemic heart disease	4217.54	3600.43	4939.41	7644.49	6434.43	9150.68
Ischemic stroke	1090.42	877.04	1334.78	1114.40	946.51	1303.41

AUSTRALASIA

Australia and New Zealand

Chronic kidney disease	178.78	204.43	155.73	208.01	230.87	187.36
Diabetes mellitus type 2	323.97	423.31	241.04	428.91	541.64	333.44
Hypertensive heart disease	34.38	51.82	27.58	37.81	46.35	31.18
Ischemic heart disease	511.65	567.11	459.11	1293.95	1448.04	1164.48
Ischemic stroke	196.53	223.90	169.55	235.93	266.32	204.62

EUROPE

Central Europe

Chronic kidney disease	179.14	160.60	197.92	237.59	220.45	254.77
Diabetes mellitus type 2	516.88	385.01	674.80	719.71	539.63	937.94
Hypertensive heart disease	200.45	145.95	255.50	263.53	176.95	285.25
Ischemic heart disease	1585.01	1524.99	1648.31	3415.47	3307.17	3546.36
Ischemic stroke	767.20	699.35	828.86	1019.39	941.40	1090.37

Eastern Europe						
Chronic kidney disease	173.38	151.62	197.78	201.98	186.82	217.71
Diabetes mellitus type 2	464.54	339.62	608.93	501.69	363.19	662.12
Hypertensive heart disease	102.36	58.04	114.12	153.39	88.43	165.74
Ischemic heart disease	2986.66	2907.75	3076.49	7115.86	6930.54	7370.94
Ischemic stroke	1250.84	1164.95	1334.74	1841.68	1751.32	1930.46
Western Europe						
Chronic kidney disease	145.03	127.41	163.94	181.60	164.86	198.95
Diabetes mellitus type 2	386.50	279.86	513.99	539.18	400.01	706.40
Hypertensive heart disease	71.30	45.27	82.79	80.26	57.09	89.95
Ischemic heart disease	534.28	503.76	570.07	1348.13	1290.19	1421.22
Ischemic stroke	219.44	192.85	245.73	290.82	259.82	320.08
LATIN AMERICA & CARIBBEAN						
Andean Latin America						
Chronic kidney disease	605.86	668.50	546.34	636.10	702.97	574.93
Diabetes mellitus type 2	793.91	968.53	648.73	798.89	990.25	637.37
Hypertensive heart disease	147.31	179.82	124.79	138.82	157.92	99.98
Ischemic heart disease	822.61	915.99	734.09	1337.00	1493.82	1202.06
Ischemic stroke	234.56	263.23	208.16	264.77	295.23	235.57
Brazil and Paraguay						
Chronic kidney disease	392.59	426.47	363.98	484.10	509.30	460.80
Diabetes mellitus type 2	710.78	846.13	590.91	754.37	895.80	632.54
Hypertensive heart disease	183.67	268.73	143.70	204.60	261.35	175.84
Ischemic heart disease	1128.57	1165.84	1087.10	2158.94	2221.09	2073.84
Ischemic stroke	326.52	351.60	302.76	462.57	489.22	436.64
Caribbean						
Chronic kidney disease	594.85	653.85	543.99	692.39	753.84	628.85
Diabetes mellitus type 2	1183.29	1443.43	971.10	1133.19	1393.05	924.98

Hypertensive heart disease	315.13	386.82	250.24	320.11	363.48	265.40
Ischemic heart disease	1721.63	1912.09	1558.15	2655.77	2881.42	2447.40
Ischemic stroke	517.98	573.97	467.25	550.92	603.39	504.80

Central Latin America and Mexico

Chronic kidney disease	946.78	995.55	903.65	1237.30	1296.83	1170.61
Diabetes mellitus type 2	1351.97	1618.64	1129.65	1559.65	1869.86	1307.56
Hypertensive heart disease	180.01	270.97	157.41	162.10	200.78	138.55
Ischemic heart disease	1172.90	1236.24	1099.20	2118.54	2232.41	2013.60
Ischemic stroke	228.05	248.78	207.07	249.95	267.23	232.13

Southern Latin America

Chronic kidney disease	377.32	420.37	339.19	499.84	557.96	451.82
Diabetes mellitus type 2	613.51	779.55	477.08	799.91	1011.31	631.48
Hypertensive heart disease	138.24	191.65	100.99	194.67	234.23	160.71
Ischemic heart disease	892.11	1004.56	795.09	1977.57	2200.10	1785.99
Ischemic stroke	284.84	322.51	248.64	368.72	410.09	327.04

NORTH AMERICA

United States and Canada

Chronic kidney disease	329.62	364.26	298.19	406.24	438.41	374.88
Diabetes mellitus type 2	551.44	699.12	422.02	762.47	964.25	597.17
Hypertensive heart disease	118.52	130.64	68.51	197.88	218.46	95.51
Ischemic heart disease	957.51	998.05	914.79	2027.58	2107.92	1958.61
Ischemic stroke	312.17	360.02	261.20	338.94	389.15	285.64